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NOTICE OF ALLOWANCE AND FEE(S) DUE

24498 7590 03/07/2008

Joseph J. Laks Thomson Licensing LLC 2 Independence Way, Patent Operations PO Box 5312

PRINCETON, NJ 08543

EXAMINER TON, DAVID

PAPER NUMBER

ART UNIT 2117 DATE MAILED: 03/07/2008

APPLICATION NO. FELINO DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/590, 557 08/24/2006 Wen Gao PH/03/0233 8655.

TITLE OF INVENTION: ADDRESS GENERATION APPARATUS FOR TURBO INTERLEAVER AND DEINTERLEAVER IN W-CDMA SYSTEMS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	06/09/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notifical	form should be used I correspondence including d below or directed off tions.	or tran	smitting the ISSU Patent, advance or in Block 1, by (a					nould be completed where correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				No Fee pag hay	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
	ng LLC Way, Patent Operat			T be	Cer	tificate	of Mailing or Trans	
PO Box 5312 PRINCETON, N	IJ 08543							(Depositor's name)
,								(Signature)
								(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO		ATTORNEY DOCKET NO.		CONFIRMATION NO.	
10/590,557	08/24/2006			Wen Gao			PU030233	8656
				TURBO INTERLEAVE				
APPLN, TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1440 \$300		\$0		\$1740	06/09/2008
EXAM	INER		ART UNIT	CLASS-SUBCLASS				
TON, I	DAVID		2117	714-701000	_			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT. ess an assignee is ident h in 37 CFR 3.II. Comp	nge of " Indic ed. Us	Correspondence ation form e of a Customer	2. For printing on the (I) the names of up to or agents OR, alternat (2) the name of a sing registered attorney or 2 registered patent atteitsed, no name will be THE PATENT (print or ty data will appear on the I a substitute for filing an (B) RESIDENCE: (CIT	o 3 registered pater vely, le firm (having as a agent) and the nam ymeys or agents. If printed. pe) aatent. If an assign assignment.	memb es of u no nan	er a 2p to e is 3	ocument has been filed for
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44. The following receips are summittee: Ussue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies			ed)	B. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby suthorized to charge the required fee(s), any deficiency, or credit any overpayment, to Depoid Account Number (enclose an extra copy of this form).				
	s SMALL ENTITY state	ıs. See	37 CFR 1.27.	b. Applicant is no lor				
interest as shown by the	d Publication Fee (if req records of the United Sta	uired) tes Pat	will not be accepted ent and Trademark	Office.	the applicant; a regi	stered	attorney or agent; or th	e assignee or other party in
Authorized Signature				Date				
Typed or printed name				Registration No.				
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450.	FR 1.3 U.S.C USPT den, sl NOT	11. The information 122 and 37 CFR O. Time will vary hould be sent to the SEND FEES OR O.	on is required to obtain or 1.14. This collection is es depending upon the indi e Chief Information Offic COMPLETED FORMS T	retain a benefit by t timated to take 12 i vidual case. Any co er, U.S. Patent and O THIS ADDRESS	he pub minuter mment Trader S. SEN	tic which is to file (and to complete, including s on the amount of tire ark Office, U.S. Deptor of the complete of the comple	by the USPTO to process) g gathering, preparing, and ne you require to complete utment of Commerce, P.O. for Patents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/590,557	08/24/2006	Wen Gao	PU030233	8656	
24498	590 03/07/2008		EXAM	IINER	
Joseph J. Laks		TON, DAVID			
Thomson Licensin		ART UNIT	PAPER NUMBER		
	ay, Patent Operations	2117			
PO Box 5312		DATE MAILED: 03/07/2008			
PRINCETON, NI 08543			Ditte Matters, 03/07/2000		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 135 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 135 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)	
10/590,557	GAO ET AL.	
Examiner	Art Unit	
David Ton	2117	

- The MAILING DATE of this communication appears All claims being allowable, PROSECUTION ON THE MERITS IS (Of herewith (or previously mailed), a Notice of Allowance (PTOL-85) or NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGH of the Office or upon petition by the applicant. See 37 CFR 1.313 an	other appropriate communication will be mailed in due course. THIS TS. This application is subject to withdrawal from issue at the initial
 This communication is responsive to <u>Amendment_filed on 8/2</u>. 	4/2006.
 The allowed claim(s) is/are <u>1-13</u>. 	
3. ☐ Acknowledgment is made of a claim for foreign priority under a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have be 2. ☐ Certified copies of the priority documents have be 3. ☐ Copies of the certified copies of the priority documents have be 1. ☐ Copies of the certified copies of the priority documents have be only the copies of the certified copies of the priority documents have be certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of the noted below. Failure to timely comply will result in ABANDONMENTHIS THREE-MONTH PERIOD IS NOTE EXTENDABLE.	en received. en received in Application No nents have been received in this national stage application from the his communication to file a reply complying with the requirements T of this application.
INFORMAL PATENT APPLICATION (PTO-152) which gives n	
5. CORRECTED DRAWINGS (as "replacement sheets") must be (a) including changes required by the Notice of Draftsperson' 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Ar Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84 each sheek. Replacement sheet(s) should be labeled as such in the f	s Patent Drawing Review (PTO-948) attached mendment / Comment or in the Office action of c)) should be written on the drawings in the front (not the back) of
DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR	of BIOLOGICAL MATERIAL must be submitted. Note the
Attachment(s) 1. Notice of References Cited (PTO-892) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 3/24/06 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. Notice of Informal Patent Application 6. Interview Summary (PTO-413), Paper No./Mail Date 7. Examiner's Amendment/Comment 8. Examiner's Statement of Reasons for Allowance 9. Other
	/David Ton/ Primary Examiner, Art Unit 2117

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Application/Control Number: 10/590,557
Art Unit: 2117

Claims 1-13 are allowed.

2. The following is an Examiner's Statement of Reasons for Allowance:

The prior art of record teaches the claimed invention substantially, but it fails to teach or suggest singly or in combination an address generation method and apparatus for one of an interleaver and a deinterleaver in a Wideband Code Division Multiple Access (W-CDMA) system wherein the apparatus includes an address pair generator for generating an address pair (n, P(n)) in real-time for one of an interleaver operation and a deinterleaver operation that includes inter-row permutation and intra-row permutation such that, for the interleaving operation, data to be interleaved are read out from the at least one memory device using the P(n) and interleaving operation, data to be deinterleaved are read out from the at least one memory device using the n and for the deinterleaving operation, data to be deinterleaved are read out from the at least one memory device using the n and deinterleaved data are written into the at least one memory device using the P(n) as set forth in independent claims 1, 5 and 9.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance". Application/Control Number: 10/590,557
Art Unit: 2117

 The prior art of record and not relied upon is considered pertinent to applicant's disclosure.

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Ton whose telephone number is (571) 272-3828.
 The examiner can normally be reached on M-F from 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David Ton/

Primary Examiner, Art Unit 2117